

Lead (Pb) Air Quality Data Update 2006-2007 Design Values

The following is a brief summary of EPA's 2006 air quality update for lead (Pb) based on ambient monitoring data for the two year period, 2006-2007. During this two-year period:

- Of the 13 original designated nonattainment areas for the Pb NAAQS, two are still designated as nonattainment. One of these two areas, the Herculaneum, Missouri Pb nonattainment area violated the Pb NAAQS for 2006-2007. No 2006-2007 data were available for the other remaining designated Pb nonattainment area of East Helena in Lewis and Clark County, Montana. The source associated with the East Helena area closed in early 2001 and monitoring ceased in late 2001. The latest available quarters of data (from 2001) were below the NAAQS level.
- Of the 11 original Pb nonattainment areas that were subsequently redesignated to attainment, three met the Pb NAAQS in 2006-2007. The other eight redesignated areas had incomplete or no data for 2006-2007. (Table 1)
- One additional area (county) not part of an original designated Pb nonattainment area violated the Pb NAAQS in 2006-2007. (Table 2)

In 1978, the EPA established the Pb NAAQS for lead as a 1.5 microgram per cubic meter ($\mu\text{g}/\text{m}^3$) maximum quarterly average. The 1978 Pb standard is not met at a monitoring site if the maximum quarterly average for the two most recent calendar years of monitoring data exceeds 1.5 $\mu\text{g}/\text{m}^3$ (1.55 round up).

Air quality data from EPA's Air Quality System (AQS) were used to calculate lead design values. The data used for these calculations were obtained from AQS on July 8, 2008. As of August 26, 2008, no regulatory decisions on attainment status have been made for any area based on these specific calculations. For information concerning these data, contact:

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Table 1. Areas previously designated nonattainment for the Pb NAAQS, 2006-2007.

| <u>State</u> | <u>Designated Nonattainment Area</u> | <u>EPA Region</u> | <u>Designation Status</u> ¹ | <u>2006-2007 Design Value (based on 1978 NAAQS, max quarterly average)</u> ^{1,2,3} | <u>Met 1978 NAAQS 2006-2007?</u> ⁴ |
|--------------|---|-------------------|--|---|---|
| AL | Jefferson County, AL | 4 | Maintenance | ND | ND |
| GA | Muscogee County, GA | 4 | Maintenance | ND | ND |
| IN | Marion County, IN | 5 | Maintenance | ND | ND |
| MN | Dakota County, MN | 5 | Maintenance | 0.7 | Incomplete |
| MO | Dent Township, MO (part of Iron County) | 7 | Maintenance | 1.3 | Yes |
| MO | Herculaneum, MO (part of Jefferson County) | 7 | Nonattainment | 1.9 | No |
| MO | Liberty and Arcadia, MO (part of Iron County) | 7 | Maintenance | 0.2 | Yes |
| MT | East Helena Area (Lewis and Clark Co.), MT | 8 | Nonattainment | ND | ND |
| NE | Douglas County, NE (portion of city of Omaha) | 7 | Maintenance | ND | ND |
| TN | Fayette County, TN | 4 | Maintenance | ND | ND |
| TN | Shelby County, TN | 4 | Maintenance | ND | ND |
| TN | Williamson County, TN | 4 | Maintenance | ND | ND |
| TX | Collin County, TX | 6 | Maintenance | 0.8 | Yes |

1. Area designation status as of July 18, 2008.

2. The air quality design value for the 1978 Pb NAAQS is defined as the maximum quarterly average over a 2-year period (i.e., 2006-2007). The level of the 1978 Pb NAAQS is 1.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) which is not to be exceeded in any calendar quarter. The updated design values are computed for the 2006-2007 period using federal reference or equivalent Pb data reported by the Tribes and the State and local governments to EPA's Air Quality System (AQS) as of July 8, 2008. Concentrations flagged by States and Tribes as exceptional events (e.g. high winds, wildfires, volcanic eruptions, construction) and concurred by the EPA Regional Office are not included in the calculation of these design values. No regulatory decisions on attainment status have been made for areas based upon this data. In some cases the data are still under review.

3. Underlined values are based on incomplete data and are generally not valid for regulatory usage.

4. ND = No Data

Source: U.S. EPA's Air Quality System (AQS) as of July 8, 2008.

Table 2. Additional areas (counties) failing to meet the Pb NAAQS in 2006-2007.

| <u>State</u> | <u>County</u> | <u>EPA Region</u> | <u>State FIPS</u> | <u>County FIPS</u> | <u>2006-2007 Design Value (based on 1978 NAAQS, max quarterly average)¹</u> | <u>2006-2007 Design Value Site (highest site-level design value in the county based on 1978 NAAQS)</u> | <u>CBSA Name</u> |
|--------------|---------------|-------------------|-------------------|--------------------|--|--|-------------------------------------|
| Florida | Hillsborough | 4 | 12 | 057 | 1.6 | 120571066 | Tampa-St. Petersburg-Clearwater, FL |

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Source: U.S. EPA's Air Quality System (AQS) as of July 8, 2008.

